NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

OBSTRUCTION REMOVAL

(Ac.)

CODE 500

DEFINITION

Removal and disposal of unwanted, unsightly or hazardous buildings, structures, vegetation, landscape features, and other materials.

PURPOSE

To safely remove and dispose of unwanted obstructions and materials in order to apply conservation practices or facilitate planned use of abandoned mine lands, farms, ranches, construction sites, and recreation areas.

CONDITIONS WHERE PRACTICE APPLIES

On land where existing obstructions interfere with planned use and development.

Federal, State and Local

Design and construction activities shall comply with all federal, state, and local laws, rules, and regulations governing activities in or along streams, pollution abatement, health, and safety.

The owner or operator shall be responsible for securing all required permits or approvals and for performing all planned work in accordance with such laws and regulations. NRCS employees are not to assume responsi bility for procuring these permits, rights, or approvals, or for enforcing laws and regulations. NRCS may provide the landowner or operator with technical information needed to obtain the required rights or approvals to construct, operate, and maintain the practice.

Permits may be required from the following agencies when obstruction removal is NRCS, NHCP

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performed within the boundaries of a stream or floodplain or if burning is required:

- 1. U.S. Army Corps of Engineers
- 2. WV Department of Natural Resources
- 3. WV Public Lands Corporation
- 4. US Fish and Wildlife Service
- 5. Local state and county ordinances

Work near waters where there is a present or possible presence of endangered or threatened species require notification and collaboration with the USFWS prior to implementation.

Work in or adjacent to "Waters of the US" may require a WV Public Land Corporation Application, a Nation Wide Permit or appropriate Individual Section 404 permit from the USCOE prior to implementation of the project. All required permits will be approved prior to construction implementation.

CRITERIA

Obstruction removal shall be planned, designed, and carried out to meet all federal, state, and local laws and regulations.

Rock piles, boulders, stones, fences, hedgerows, abandoned buildings and structures, trash, and similar obstructions that would interfere with planned use and development shall be removed. All debris such as broken concrete and masonry, structural steel and wood, stones, stumps, slash, and sterile or toxic soil shall be disposed of so that they will not impede subsequent work or cause damage to offsite or other areas.

NRCS, WV August, 2007

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service State Office or visit the electronic Field Office Technical Guide (e-FOTG) located on our web site. Note: Bold italics is information added or changes made to the National Conservation Standard by WV.

Disposal shall be by burning, burying, or removing to an approved landfill in an environmentally acceptable manner.

All required gully shaping shall be performed to specified dimensions and grades. Fills shall be compacted as appropriate. The cover over buried materials shall be designed to be adequate for the planned use, treatment, and vegetation.

The shaping or filling of gullies will be such that the completed work will blend with the surrounding topography, will facilitate the planned land use, and will limit erosion to prevent reoccurrence of the gully.

Gully fills and backfill of excavations for obstruction removal shall be compacted such that detrimental settlement will not occur.

The cover over buried materials shall be designed to be adequate for the planned use, treatment, and vegetation, but will not be less than 1 ft.

When the disturbed area will not be planted to crops and no further construction activity is planned for the area, vegetation shall be established according to the requirements of the West Virginia standard for Critical Area Planting (342) or Pasture and Hayland Planting (521).

Appropriate erosion control practices consistent with local and state guidelines shall be applied on disturbed areas.

Special attention will be given to maintaining or improving habitat for fish and wildlife where applicable.
Consideration of such things as creation of pools and riffles in streams, windrowing debris, and maintaining den and food trees shall be explored.

Historically or archaeologically significant and scenic values shall be identified and preserved as appropriate.

Operation and Maintenance

Obstruction Removal is normally done in preparation for, or concurrently with, other conservation practice installations.

Therefore the O&M plan for obstruction removal should be incorporated within the

O&M plan for those practices. Items that should be considered in the plan are:

- 1. Periodic inspections.
- 2. Repair of eroding areas.
- 3. Repair of settlement areas where excavations were filled or buried debris has deteriorated.
- 4. Maintenance of vegetation, where required by mowing, fertilization, liming, or reseeding.

PLANS AND SPECIFICATIONS

Plans and specifications shall be prepared in accordance with the criteria of this standard and shall describe the requirements for applying the practice to achieve its intended use. Additional requirements for support data can be located in 210-VI-EFH, WV-45, "Preparation of Engineering Plans Design and Construction Support Data for Conservation Practices".

Specifications for obstruction removal may be developed from NEH-20 specifications, West Virginia 700 Series specifications or the attached specification with the following guidelines:

- 1. Limits of the obstruction removal operation shall be shown on the drawings.
- 2. Manmade structures that are to be removed shall be designated on the drawings along with the extent of removal.
- 3. Trees and other structures not to be disturbed will be designated on the drawings.
- 4. Disposal methods and areas shall be designated on the drawings. Finished grade for disposal of excavated material shall also be shown.
- 5. Fill placement, compactive effort, and moisture content will be shown on the drawings if different than stated in the attached specification.
- 6. Vegetative requirements will be shown on the drawings or in an appropriate seeding specification.

Construction Specification

All trees, stumps, brush, and other woody vegetation to be removed from the designated areas shall be cut within the specified

maximum distance above the ground level. Root systems shall be grubbed out of the ground and disposed of when so stated. Trees shall be felled in such a manner as to avoid damage to other trees and property that are not part of the obstruction removal operations. Structure foundations and other subsurface manmade improvements shall be removed to the extent shown.

All rock piles, boulders, stones, fences, hedgerows, abandoned buildings and structures, trash, deposition, and similar obstructions shall be removed as described on the drawings. All debris shall be disposed of by burning, burying, piling in designated disposal areas, or removing to an approved land fill. All burning shall conform to regulations in effect in the area. Material to be buried shall be compacted using available construction equipment and covered with a minimum of one foot of earth cover unless otherwise specified on the drawings.

All works of improvement and vegetation not to be disturbed or removed, as shown on the drawings, shall be protected from any disturbance or damage.

Construction shall be done in such a way that chemicals, fuels, lubricants and waste materials will not pollute air and water. Erosion, air pollution, and water pollution will be minimized and held within legal limits.

Measures and construction methods that prevent erosion and control sediment shall be incorporated as shown on the drawings.

If herbicide treatment is planned, the stumps and brush in the specified area shall be treated at the time of clearing according to the recommendations of the manufacturer of the herbicide specified or being used. Only herbicides designated by the U. S. Environmental Protection Agency for use around water sources shall be used.

A protective cover of vegetation shall be established on all exposed surfaces where soil and climatic conditions permit. Lime and fertilizer shall be spread at the specified rate and shall be disked into the soil to a depth of 4 inches to prepare a seedbed. Seed and mulch shall be applied at the specified rate. In some cases, temporary vegetation may be used for protection until conditions are suitable for establishment of permanent vegetation.

Where soil or climatic conditions do not permit the establishment of vegetation, and protection is needed, non-vegetative means such as mulches or gravel may be used.

All work shall be done such that the installed practice gives a completed and finished appearance.